

Requirement Number	Title	Applies to	Source Reference	Applicable TGDC Resolutions
<i>Part 1, Chapter 2: Conformance Clause</i>				
2.4-A	Implementation statement	Voting system	VVSG'05, Vol I, 1.6.4	24-05, 09-06
2.5.3-A	Implementation statement, system classes	Voting system	New requirement	12-05,24-05, 03-06
2.5.3-B	Implementation statement, device classes	Voting system	New requirement	12-05,24-05, 03-06
2.5.3-C	Implementation statement, voting variations documentation references	Voting system	New requirement	18-05,24-05
2.6-A	Extensions shall not break conformance	Voting system		12-05, 24-05
2.7-A	Software independence	Voting system	New requirement	24-05, 06-06
2.7.1-A	Independent voter-verifiable records may be software independent	IVVR	New requirement	12-05, 24-05
2.7.1-B	IVVR voting system requires IVVR vote-capture device	IVVR	New requirement	12-05,24-05, 03-06
2.7.2-A	Innovation class submissions follow same procedures as standard	Voting system	New requirement	24-05, 03-06
2.7.2-B	Identification of innovativeness	Voting system	New requirement	18-05,24-05, 03-06
2.7.2-C	Innovation class submission creates new device class	Voting system	New requirement	18-05,24-05,03-06
2.7.2-C.1	Innovative device class submission	Voting system	New requirement	12-05,24-05, 03-06
2.7.2-C.2	Innovation device class identification of requirements	Voting system	New requirement	12-05,24-05, 03-06
<i>Part 1, Chapter 3: Usability, Accessibility &amp; Privacy Requirements</i>				
3.2.1.2-A	Usability testing by manufacturer for general population	Voting system	VVSG2005 I.3.1.1	04-05, 05-05
3.2.2-A	Notification of effect of overvoting	Voting system	VVSG2005 I.2.3.3	08-05
3.2.2-B	Undervoting to be permitted	Voting system	VVSG2005 I.2.3.3	08-05
3.2.2-C	Correction of ballot	Voting system	VVSG2005 I.2.3.3	08-05
3.2.2-D	Notification of ballot casting	DRE, PCOS	VVSG2005 I.2.3.3	08-05
3.2.2.1-A	Prevention of overvotes	VEBD	VVSG2005 I.2.3.3	08-05
3.2.2.1-B	Warning of undervotes	VEBD	VVSG2005 I.2.3.3	08-05
3.2.2.1-C	Independent correction of ballot	VEBD	VVSG2005 I.2.3.3	08-05
3.2.2.1-D	Ballot editing per contest	VEBD	VVSG2005 I.2.3.3	08-05
3.2.2.1-E	Contest navigation	VEBD	VVSG2005 I.2.3.3	08-05
3.2.2.1-F	Notification of ballot casting failure (DRE)	DRE	2002 VSS I.2.4.3.3.k / VVSG2005 I.2.3.3.3.m	08-05
3.2.2.2-A	Notification of overvoting	PCOS	VVSG2005 I.2.3.2	08-05
3.2.2.2-B	Notification of undervoting	PCOS	VVSG2005 I.2.3.2	08-05
3.2.2.2-C	Notification of blank ballots	PCOS	VVSG2005 I.2.3.2	08-05
3.2.2.2-D	Ballot correction or submission following notification	PCOS	VVSG2005 I.2.3.2	08-05

3.2.2.2-E	Handling of marginal marks	Precinct tabulator	VVSG2005 I.2.3.2	08-05
3.2.2.2-F	Notification of ballot casting failure (PCOS)	PCOS	VVSG2005 I.2.3.2	08-05
3.2.3.1-A	System support of privacy	Voting system	VVSG2005 I.3.1.7	03-05,09-05
3.2.3.1-A.1	Visual privacy	Voting system	VVSG2005 I.3.1.7	03-05,09-05
3.2.3.1-A.2	Auditory privacy	VEBD-A	VVSG2005 I.3.1.7	03-05,09-05
3.2.3.1-A.3	Privacy of warnings	Voting system	VVSG2005 I.3.1.7	03-05,09-05
3.2.3.1-A.4	No receipts	Voting system	VVSG2005 I.3.1.7	03-05,09-05
3.2.3.2-A	No recording of alternate languages	Voting system	VVSG2005 I.3.1.7.2	06-05,08-05
3.2.3.2-B	No Recording of Accessibility Features	Voting system	VVSG2005 I.3.1.7	06-05,08-05
3.2.4-A	Completeness of instructions	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-B	Availability of assistance from the system	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-C	Plain Language	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-C.1	Clarity of warnings	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-C.2	Context before action	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-C.3	Simple vocabulary	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-C.4	Start each instruction on a new line	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-C.5	Use of positive	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-C.6	Use of imperative voice	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-C.7	Gender-based pronouns	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-D	No bias among choices	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-E	Ballot design	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-E.1	Contests split among pages or columns	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-E.2	Indicate maximum number of candidates	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-E.3	Consistent representation of candidate selection	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-E.4	Placement of instructions	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-F	Conventional use of color	Voting system	VVSG2005 I.3.2.8	06-05,08-05
3.2.4-G	Icons and language	Voting device	VVSG2005 I.3.2.8	06-05,08-05
3.2.5-A	Screen flicker	VEBD-V	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.5-B	Resetting of adjustable aspects at end of session	Voting system	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.5-C	Ability to reset to default values	Voting system	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.5-D	Minimum font size	Voting device	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.5-E	Available font sizes	VEBD-V	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.5-F	Use of sans serif font	Voting device	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.5-G	Legibility of paper ballots and verification records	Voting system	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.5-G.1	Legibility via font size	Voting system	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.5-G.2	Legibility via magnification	Voting system	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.5-H	Contrast Ratio	Voting device	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.5-I	High contrast for electronic displays	VEBD-V	VVSG2005 I.3.1.5	02-05,03-05,04-05

3.2.5-J	Accommodation for color blindness	Voting system	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.5-K	No reliance solely on color	Voting system	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.6-A	No page scrolling	VEBD	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.6-B	Unambiguous feedback for voter's selection	Voting system	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.6-C	Accidental Activation	Voting device	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.6-C.1	Size and separation of touch areas	VEBD	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.6-C.2	No repeating keys	Voting device	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.6.1-A	Maximum initial system response time	VEBD	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.6.1-B	Maximum completed system response time for vote confirmation	VEBD	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.6.1-C	Maximum completed system response time for all operations	VEBD-V	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.6.1-D	System response indicator	VEBD	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.6.1-E	Voter inactivity time	VEBD	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.6.1-F	Alert time	VEBD	VVSG2005 I.3.1.5	02-05,03-05,04-05
3.2.7-A	General support for alternative languages	Voting system	VVSG2005 I.3.1.5	04-05, 05-05,06-05
3.2.7-A.1	Voter control of language	VEBD	VVSG2005 I.3.1.5	04-05, 05-05,06-05
3.2.7-A.2	Complete information in alternative language	Voting system	VVSG2005 I.3.1.5	04-05, 05-05,06-05
3.2.7-A.3	Auditability of records for english readers	Voting system	VVSG2005 I.3.1.5	04-05, 05-05,06-05
3.2.7-A.4	Usability testing by manufacturer for alternative languages	Voting system	VVSG2005 I.3.1.5	04-05, 05-05,06-05
3.2.8-A	Clarity of system messages for poll workers	Voting system	VVSG2005 I.3.1.5	08-05, 09-05
3.2.8.1-A	Ease of normal operation	Voting system	VVSG2005 I.3.1.5	08-05, 09-05
3.2.8.1-B	Usability testing by manufacturer for poll workers	Voting system	New Requirement	08-05, 09-05
3.2.8.2-A	Safety certification	Voting system	New Requirement	08-05, 09-05
3.3.1-A	Accessibility throughout the voting session	Acc-VS	VVSG2005 I.3.2.1-4	02-05,03-05,04-05
3.3.1-B	Complete information in alternative formats	Acc-VS	VVSG2005 I.3.2.1-4	02-05,03-05,04-05
3.3.1-C	No dependence on personal assistive technology	Acc-VS	VVSG2005 I.3.2.1-4	02-05,03-05,04-05
3.3.1-D	Secondary means of voter identification	Acc-VS	New Requirement	02-05,03-05,04-05
3.3.1-E	Accessibility of paper-based vote verification	Acc-VS	New Requirement	02-05,03-05,04-05
3.3.1-E.1	Audio readback for paper-based vote verification.	Acc-VS	New Requirement	02-05,03-05,04-05
3.3.2-A	Usability testing by manufacturer for voters with low vision	Acc-VS	New Requirement	05-05,28-05
3.3.2-B	Adjustable saturation for color displays	Acc-VS	VVSG2005 I.3.2.2.1	02-05,04-05,06-05
3.3.2-C	Distinctive buttons and controls	Acc-VS	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.2-D	Synchronized audio and video	Acc-VS	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.3-A	Usability testing by manufacturer for blind voters	Acc-VS	VVSG2005 I.3.2.2.2	05-05,28-05
3.3.3-B	Audio-tactile interface	Acc-VS	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.3-B.1	Equivalent functionality of ATI	Acc-VS	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.3-B.2	ATI supports repetition	Acc-VS	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.3-B.3	ATI supports pause and resume	Acc-VS	VVSG2005 I.3.2.2.2	02-05,04-05,06-05

3.3.3-B.4	ATI supports transition to next or previous contest	Acc-VS	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.3-B.5	ATI can skip referendum wording	Acc-VS	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.3-C	Audio features and characteristics	VEBD-A	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.3-C.1	Standard connector	VEBD-A	VVSG2005 I.3.2.2.2	02-05,04-05,06-05,22-05
3.3.3-C.2	T-Coil coupling	VEBD-A	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.3-C.3	Sanitized headphone or handset	VEBD-A	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.3-C.4	Initial volume	VEBD-A	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.3-C.5	Range of volume	VEBD-A	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.3-C.6	Range of frequency	VEBD-A	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.3-C.7	Intelligible audio	VEBD-A	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.3-C.8	Control of speed	VEBD-A	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.3-D	Ballot activation	Acc-VS	VVSG2005 I.3.2.2.2	12-05, 06-06,01-07,02-07
3.3.3-E	Ballot submission and vote verification	Acc-VS	VVSG2005 I.3.2.2.2	12-05, 06-06,01-07,02-07
3.3.3-F	Tactile discernability of controls	Acc-VS	VVSG2005 I.3.2.2.2	12-05, 06-06,01-07,02-07
3.3.3-G	Discernability of key status	Acc-VS	VVSG2005 I.3.2.2.2	12-05, 06-06,01-07,02-07
3.3.4-A	Usability testing by manufacturer for voters with dexterity disabilities	Acc-VS	VVSG2005 I.3.2.2.2	05-05,28-05
3.3.4-B	Support for non-manual input	Acc-VS	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.4-C	Ballot submission and vote verification	Acc-VS	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.4-D	Manipulability of controls	Acc-VS	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.4-E	No dependence on direct bodily contact	Acc-VS	VVSG2005 I.3.2.2.2	02-05,04-05,06-05
3.3.5-A	Clear floor space	Acc-VS	VVSG2005 I.3.2.4	02-05,04-05,06-05
3.3.5-B	Allowance for assistant	Acc-VS	VVSG2005 I.3.2.4	02-05,04-05,06-05
3.3.5-C	Visibility of displays and controls	Acc-VS	VVSG2005 I.3.2.4	02-05,04-05,06-05
3.3.5.1-A	Forward approach, no obstruction	Acc-VS	VVSG2005 I.3.2.4	02-05,04-05,06-05
3.3.5.1-B	Forward approach, with obstruction	Acc-VS	VVSG2005 I.3.2.4	02-05,04-05,06-05
3.3.5.1-B.1	Maximum size of obstruction	Acc-VS	VVSG2005 I.3.2.4	02-05,04-05,06-05
3.3.5.1-B.2	Maximum high reach over obstruction	Acc-VS	VVSG2005 I.3.2.4	02-05,04-05,06-05
3.3.5.1-B.3	Toe clearance under obstruction	Acc-VS	VVSG2005 I.3.2.4	02-05,04-05,06-05
3.3.5.1-B.4	Knee clearance under obstruction	Acc-VS	VVSG2005 I.3.2.4	02-05,04-05,06-05
3.3.5.1-C	Parallel approach, no obstruction	Acc-VS	VVSG2005 I.3.2.4	02-05,04-05,06-05
3.3.5.1-D	Parallel approach, with obstruction	Acc-VS	VVSG2005 I.3.2.4	02-05,04-05,06-05
3.3.5.1-D.1	Maximum size of obstruction	Acc-VS	VVSG2005 I.3.2.4	02-05,04-05,06-05

3.3.5.1-D.2	Maximum high reach over obstruction	Acc-VS	VVSG2005 I.3.2.4	02-05,04-05,06-05
3.3.6-A	Reference to audio requirements	Acc-VS	VVSG2005 I.3.2.2	02-05,04-05,06-05
3.3.6-B	Visual redundancy for sound cues	Acc-VS	VVSG2005 I.3.2.2	02-05,04-05,06-05
3.3.6-C	No electromagnetic interference with hearing devices	Voting device	VVSG2005 I.3.2.2	02-05,04-05,06-05
3.3.7-A	General support for cognitive disabilities	Acc-VS	New Requirement	02-05,04-05,06-05
3.3.8-A	Use of ATI	Acc-VS	VVSG2005 I.3.2.2	02-05,04-05,06-05
3.3.9-A	Speech not to be required by equipment	Voting system	New Requirement	02-05,04-05,06-05
<i>Part 1, Chapter 4: Security &amp; Audit Architecture</i>				
4.2.1-A	Support for pollbook audit	Voting system	[VVSG2005] I.2.1.5.1	18-05,06-06
4.2.1-A.1	Requirements on voting system records and reports	Vote-capture device, Tabulator, Activation device	[VVSG2005] I.5.4.4	18-05,06-06
4.2.2-A	Support for hand audit of paper records	Voting system	[VVSG2005] I.2.1.5.1	18-05,06-06
4.2.2-A.1	Information required to support hand auditing	Vote-capture device, Tabulator	[VVSG2005] I.5.4.4	18-05,06-06
4.2.3-A	Support for reconciling voting device totals	EMS4.2.3-B Requirements on voting system records	Vote-capture device, Tabulator, Activation device	18-05,06-06
4.2.4-A	Support for observational testing	Vote-capture device	[VVSG2005] I.2.1.5.1	18-05,06-06
4.2.4-B	Authentication requirements for supporting observational testing	Vote-capture device, Activation device	New Requirement	06-05,17-05,18-05
4.3.1-A	Records required to be in open format	Voting system	New Requirement	17-05,18-05
4.3.1-B	Records to be capable of being printed	Voting system	[VVSG2005] I.2.1.5.1-a	18-05, 21-05
4.3.1-C	Cryptographic Protection of Records from Voting Devices	Voting system	[VVSG2005] I.7.9.3-d	18-05, 21-05
4.3.2-A	Tabulator Summary Count Record	Tabulator	[VVSG2005] I.2.4.3	18-05, 21-05
4.3.2-B	Tabulator summary count record handling requirement	Tabulator	New Requirement	18-05,22-05
4.3.2-C	Tabulator collection of ballot images record	Tabulator	New Requirement	18-05,22-05
4.3.2-C.1	DRE collection of ballot images record	DRE	[VVSG2005] I.7.9.3-b, I.7.9.3-e	18-05,22-05
4.3.2-C.2	Collection of cast votes handling requirement	Tabulator	New Requirement	18-05,22-05
4.3.2-D	Electronic records event log record handling requirement	Tabulator	New Requirement	18-05,22-05

4.3.3-A	EMS tabulator summary count record	EMS	[VMSG2005] I.2.4.3	18-05,22-05
4.3.3-A.1	Tabulator report combination for privacy	EMS	New Requirement	18-05,22-05
4.3.3-B	Precinct Summary Count Records	EMS	[VMSG2005] I.2.4.3	18-05,22-05
4.3.3-C	Precinct Adjustment Record	EMS	New Requirement	18-05,22-05
4.3.4-A	Requirement to Verify Signed Records	EMS	New Requirement	18-05,22-05
4.3.5-A	Ballot counter	Tabulator, Vote-capture device	Implied by design requirements in [VSS2002] I.2.2.9, [VMSG2005] I.2.1.8	18-05,22-05
4.3.5-B	Ballot counter availability	Tabulator, Vote-capture device	Implied by design requirements in [VSS2002] I.2.2.9, I.2.1.8	18-05,22-05
4.4.1-A	Direct verification by voters	IVVR vote-capture device	New Requirement	18-05,22-05
4.4.1-B	Direct review by election officials	IVVR vote-capture device	New Requirement	12-05, 18-05,06-06
4.4.1-C	Support for hand auditing	IVVR vote-capture device	New Requirement	12-05, 18-05,06-06
4.4.1-D	Use in recounts	IVVR vote-capture device	New Requirement	12-05, 18-05,06-06
4.4.1-E	Durability	IVVR vote-capture device	New Requirement	12-05, 18-05,06-06
4.4.1-F	Tamper Evidence	IVVR vote-capture device	New Requirement	12-05, 18-05, 22-05
4.4.1-G	Support for privacy	IVVR vote-capture device	New Requirement	12-05, 18-05,06-06
4.4.1-H	Public format	IVVR vote-capture device	[VMSG2005] I.7.9.3-f	12-05, 18-05,06-06
4.4.1-I	Human readable information sufficient for unambiguous interpretation of cast vote	IVVR vote-capture device	[VMSG2005] I.7.9.1-b, I.7.9.1-c, I.7.9.3-h	12-05, 18-05,06-06
4.4.1-I.1	No Codebook Required to Interpret IVVR	IVVR vote-capture device	New Requirement	12-05,18-05, 21-05
4.4.1-I.2	Multiple physical media	IVVR vote-capture device	[VMSG2005] I.7.9.6-f	12-05,18-05, 21-05
4.4.1-J	IVVR accepted or rejected	IVVR vote-capture device	[VMSG2005] I.7.9.2-b	12-05,18-05, 21-05

4.4.1-J.1	IVVR accepted or rejected for multiple physical media	IVVR vote-capture device	New Requirement	12-05,18-05, 21-05
4.4.1-K	Non human-readable contents permitted	IVVR vote-capture device	[VMSG2005] I.7.9.3-g	12-05,18-05, 21-05
4.4.1-K.1	Machine readable part contains same information as human readable part	IVVR vote-capture device	New Requirement	12-05,18-05, 21-05
4.4.1-K.2	Machine-readable contents may include error correction/detection information	IVVR vote-capture device	[VMSG2005] I.7.9.3-g	12-05,18-05, 21-05
4.4.1-K.3	Public format for IVVR non-human-readable data	IVVR vote-capture device	[VMSG2005] I.7.9.3-f	12-05,18-05, 21-05
4.4.2.1-A	VVPAT Definition and Components	VVPAT	[VMSG2005] I.7.9.1-a	39-05,06-06,02-07
4.4.2.2-A	Printer connection to voting system	VVPAT	[VMSG2005] I.7.9.4-a	39-05,06-06,02-07
4.4.2.2-B	Printer able to detect errors	VVPAT	[VMSG2005] I.7.9.4-g	39-05,06-06,02-07
4.4.2.2-C	VVPAT error handling specific requirements	VVPAT	[VMSG2005] I.7.9.4-h	39-05,06-06,02-07
4.4.2.2-C.1	VVPAT printer error recovery guidelines in documentation	VVPAT	[VMSG2005] I.7.9.4-k	39-05,06-06,02-07
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6.1-C	Voting system, minimum devices included	Voting system	Clarification of [VSS2002]	25-05, 09-06
6.1-D	Paper ballots, separate data from metadata	Paper-based device	[VSS2002] I.3.2.4.2.1	25-05, 09-06
6.1-E	Card holder	MMPB	[VSS2002] I.3.2.4.2.5	25-05, 09-06
6.1-F	Ballot boxes	Paper-based device	[VSS2002] I.3.2.4.2.6	25-05, 09-06
6.1-G	Vote-capture device activity indicator	Vote-capture device, Programmed device	Clarified from [VSS2002] I.2.5.1.c and I.3.2.4.3.1	25-05, 09-06
6.1-H	Precinct devices operation	Precinct tabulator, Vote-capture device	[VSS2002] I.3.2.2.1 / [VVSG2005] I.4.1.2.1	25-05, 09-06
6.2-A	System composition	All voting vaiations, All elections, All ballot types	Conformance ramifications of system/device relationship	24-05,25-05,09-06
6.3.1-A	Failure rate benchmark	Voting device	Revised from [VSS2002] I.3.4.3 / [VVSG2005] I.4.3.3	24-05,25-05,09-06
6.3.1-B	No single point of failure	Voting system	[VSS2002] I.2.2.4.1.a / [VVSG2005] I.2.1.4.a	24-05,25-05,09-06

6.3.1-C	Protect against failure of input and storage devices	Voting system	[VSS2002] I.2.2.4.1.e / [VMSG2005] I.2.1.4.e	24-05,25-05,09-06
6.3.2-A	Satisfy integrity constraints	Voting system	Formalization of general requirements	24-05,25-05,09-06,10-06
6.3.2-B	End-to-end accuracy benchmark	Voting system	Generalized and clarified from [VSS2002] I.3.2.1 / [VMSG2005] I.4.1.1	24-05,25-05,09-06,10-06
6.3.3-A	Misfeed rate benchmark	Paper-based device, Tabulator, EBM	Merge of [VSS2002] I.3.2.5.1.4.b and I.3.2.5.2.c, reset benchmark	22-05,25-05,09-06
6.3.4.1-A	Power supply – energy service provider	Electronic device	[NFPA05]	22-05,25-05,09-06
6.3.4.1-B	Telecommunications services provider	Electronic device	New requirement	22-05,25-05,09-06
6.3.4.2-A	Power port disturbances	Electronic device	[ANSI06], [IEEE02a], [ITIC00]	22-05,25-05,09-06
6.3.4.2-A.1	Combination Wave	Electronic device	[IEEE02a]	22-05,25-05,09-06
6.3.4.2-A.2	Ring Waves	Electronic device	[IEEE02a]	22-05,25-05,09-06
6.3.4.2-A.3	Electrical Fast Transient Burst	Electronic device	[IEEE02a]	22-05,25-05,09-06
6.3.4.2-A.4	Outages, sags and swells	Electronic device	[ITIC00]	22-05,25-05,09-06
6.3.4.2-B	Communications (telephone) port disturbances	Electronic device	[Telcordia06]	22-05,25-05,09-06
6.3.4.2-B.1	Emissions from other connected equipment	Electronic device	[Telcordia06], [ANSI02]	22-05,25-05,09-06
6.3.4.2-B.2	Lightning-induced disturbances	Electronic device	[Telcordia06]	22-05,25-05,09-06
6.3.4.2-B.3	Power fault-induced disturbances	Electronic device	[Telcordia06]	22-05,25-05,09-06
6.3.4.2-B.4	Power contact disturbances	Electronic device	[Telcordia06]	22-05,25-05,09-06
6.3.4.2-B.5	Electrical Fast Transient (EFT)	Electronic device	[Telcordia06], [ISO04b]	22-05,25-05,09-06
6.3.4.2-B.6	Steady-state induced voltage	Electronic device	[Telcordia06]	22-05,25-05,09-06
6.3.4.2-C	Interaction between power port and telephone port	Electronic device	[IEEE02], [IEEE05]	22-05,25-05,09-06
6.3.4.3-A	Electromagnetic field immunity (80 MHz to 6.0 GHz)	Electronic device	[ANSI97], [ISO06a], [ISO06d]	22-05,25-05,09-06
6.3.4.3-B	Electromagnetic field immunity (150 kHz to 80 MHz)	Electronic device	[ANSI97], [ISO06b]	22-05,25-05,09-06
6.3.4.3-C	Electrostatic discharge immunity	Electronic device	[ANSI93], [ISO01]	22-05,25-05,09-06
6.3.5.1-A	Power port connection to the facility power supply	Electronic device	[IEEE92], [FCC07]	22-05,25-05,09-06

6.3.5.1-B	Telephone port connection to the public network	Electronic device	[Telcordia06], [ANSI02], [FCC07a]	22-05,25-05,09-06
6.3.5.1-C	Leakage via grounding port	Electronic device	[UL06], [NFPA05]	22-05,25-05,09-06
6.3.5.2-A	Radiated radio frequency emissions	Electronic device	[FCC07]	22-05,25-05,09-06
6.3.6.1-A	Dielectric stresses	Electronic device	[Telcordia06]	14-05,29-05,09-06
6.4.1.2-A	Acceptable programming languages	Programmed device	[VMSG2005] I.5.2.1, I.5.2.4 and II.5.4.1	14-05,29-05,09-06
6.4.1.2-A.1	COTS language extensions are acceptable	Voting System	Tightening of [VMSG2005] I.5.2.4 and II.5.4.1	14-05,29-05,09-06
6.4.1.3-A	Acceptable coding conventions	Programmed device	Rewrite of [VSS2002] I.4.2.6	14-05,29-05,09-06
6.4.1.3-A.1	Published	Programmed device	Clarification of [VSS2002] I.4.2.6	14-05,29-05,09-06
6.4.1.3-A.2	Credible	Programmed device	Clarification of [VSS2002] I.4.2.6	14-05,29-05,09-06
6.4.1.4-A	Modularity	Programmed device	Extracted and revised from [VSS2002] I.4.2.3	14-05,29-05,09-06
6.4.1.4-A.1	Module testability	Programmed device	Extracted and revised from [VSS2002] I.4.2.3.a	14-05,29-05,09-06
6.4.1.4-B	Module size and identification	Programmed device	Revision of [VSS2002] II.5.4.2.i, as revised by Section 6.6.4.2, Paragraph i of [P1583] and subsequent issues[5]	14-05,29-05,09-06
6.4.1.4-B.1	Callable unit length limit	Programmed device	Revision of [VSS2002] II.5.4.2.i, as revised by Section 6.6.4.2, Paragraph i of [P1583][5]	14-05,29-05,09-06
6.4.1.4-B.2	Lookup tables in separate files	Programmed device	Revision of [VSS2002] II.5.4.2.i, as revised by Section 6.6.4.2, Paragraph i of [P1583][5]	14-05,29-05,09-06

6.4.1.5-A	Block-structured exception handling	Programmed device	Extension of [VMSG2005] requirements for structured programming	14-05,29-05,09-06
6.4.1.5-A.1	Legacy library units must be wrapped	Programmed device	New requirement	14-05,29-05,09-06
6.4.1.5-B	Unstructured control flow is prohibited	Programmed device	Generalization and summary of [VMSG2005] I.5.2.4 and II.5.4.1	14-05,29-05,09-06
6.4.1.5-B.1	Goto	Programmed device	Generalization and summary of [VMSG2005] I.5.2.4 and II.5.4.1	14-05,29-05,09-06
6.4.1.5-B.2	Intentional exceptions	Programmed device	[VSS2002] I.4.2.4.d, II.5.4.1.c / [VMSG2005] I.5.2.4.a.iii, II.5.4.1	14-05,29-05,09-06
6.4.1.5-B.3	Unstructured exception handling	Programmed device	Extension of [VMSG2005] requirements for structured programming	14-05,29-05,09-06
6.4.1.5-C	Separation of code and data	Programmed device	Clarification of [VSS2002] I.4.2.4.d and II.5.4.1.c / [VMSG2005] I.5.2.4.a.iii and II.5.4.1 paragraph 4	14-05,29-05,09-06
6.4.1.6-A	Header comments	Programmed device	Revised from [VSS2002] I.4.2.7.a	14-05,29-05,09-06
6.4.1.7-A	Code coherency	Programmed device	[VSS2002] I.4.2.2	14-05,29-05,09-06
6.4.1.7-A.1	Self-modifying code	Programmed device	[VSS2002] I.4.2.2	14-05,29-05,09-06
6.4.1.7-A.2	Unsafe concurrency	Programmed device	[VSS2002] I.4.2.2	14-05,29-05,09-06

6.4.1.7-A.3	Code integrity, no strange compilers	Programmed device	[VSS2002] I.4.2.2	14-05,29-05,09-06
6.4.1.7-A.4	Interpreted code, specific COTS interpreter	Programmed device	[P1583] Section 5.6.2.2	14-05,29-05,09-06
6.4.1.7-B	Prevent tampering with code	Programmed device	Rewording/expansion of [VSS2002] I.4.2.2	14-05,29-05,09-06
6.4.1.7-C	Prevent tampering with data	Voting device	Rewording/expansion of [VSS2002] I.4.2.2	14-05,29-05,09-06
6.4.1.7-D	Monitor I/O errors	Programmed device	[VSS2002] I.2.2.2.1.e	14-05,29-05,09-06
6.4.1.8-A	Detect garbage input	Programmed device	[NIST05] [S-I-10]	14-05,29-05,09-06
6.4.1.8-A.1	Defend against garbage input	Programmed device	[VSS2002] I.2.2.5.2.2.f	14-05,29-05,09-06
6.4.1.8-B	Mandatory internal error checking	Programmed device	[P1583] Section 5.6.2.2 expansion of [VSS2002] I.4.2.2, modified	14-05,29-05,09-06
6.4.1.8-B.1	Array overflows	Programmed device	Expansion of [VSS2002] I.4.2.2	14-05,29-05,09-06
6.4.1.8-B.2	Stack overflows	Programmed device	Added precision	14-05,29-05,09-06
6.4.1.8-B.3	CPU traps	Programmed device	Added precision	14-05,29-05,09-06
6.4.1.8-B.4	Garbage input parameters	Programmed device	Elaboration on Requirement part1:6.4.1.8-B.d, which is an expansion of [VSS2002] I.4.2.2	14-05,29-05,09-06
6.4.1.8-B.5	Numeric overflows	Programmed device	Added precision	14-05,29-05,09-06
6.4.1.8-C	Recommended internal error checking	Programmed device	[P1583] Section 5.6.2.2 expansion of [VSS2002] I.4.2.2, modified	14-05,29-05,09-06
6.4.1.8-C.1	Pointers	Programmed device	Slight revision of [P1583] 6.6.4.2.e	14-05,29-05,09-06

6.4.1.8-D	Memory mismanagement	Programmed device	New requirement	14-05,29-05,09-06
6.4.1.8-E	Nullify freed pointers	Programmed device	New requirement	14-05,29-05,09-06
6.4.1.8-F	React to errors detected	Programmed device	New requirement	14-05,29-05,09-06
6.4.1.8-G	Do not disable error checks	Programmed device	New requirement	14-05,29-05,09-06
6.4.1.8-H	Roles authorized to respond to errors	Programmed device	New requirement	14-05,29-05,09-06
6.4.1.8-I	Diagnostics	Electronic device	Generalized from [VSS2002] I.2.4.1.2.2.c and I.2.4.1.3.d	14-05,29-05,09-06
6.4.1.8-J	Equipment health monitoring	Electronic device	Response to Issue #2147	14-05,29-05,09-06
6.4.1.8-K	Election integrity monitoring	Electronic device	Response to Issue #2147	14-05,29-05,09-06
6.4.1.9-A	System shall survive device failure	Voting system	Extrapolated from [VSS2002] I.2.2.3	14-05,29-05,09-06
6.4.1.9-B	Failures shall not compromise voting or audit data	Voting system	Extracted and generalized from [VSS2002] I.4.2.3.e	14-05,29-05,09-06
6.4.1.9-C	Device shall survive component failure	Voting device	Reworded from [VSS2002] I.2.2.3.b and c	14-05,29-05,09-06
6.4.1.9-D	Controlled recovery	Programmed device	Generalization from [VSS2002] I.2.2.5.2.2.g.	14-05,29-05,09-06
6.4.1.9-D.1	Nested error conditions	Programmed device	Slight relaxation of [VSS2002] I.2.2.5.2.2.g	14-05,29-05,09-06
6.4.1.9-D.2	Reset CPU error states		Added precision	14-05,29-05,09-06
6.4.1.9-E	Coherent checkpoints	Programmed device	[VSS2002] I.2.2.3.a	14-05,29-05,09-06
6.4.2.1-A	List of standards	Voting system	New requirement	22-05,30-05,09-06
6.4.2.2-A	Identification of systems	Voting system	New requirement	22-05,30-05,09-06
6.4.2.2-A.1	Secure tag	Voting system	New requirement	22-05,30-05,09-06

6.4.2.2-A.2	Tag contents	Voting system	New requirement	22-05,30-05,09-06
6.4.2.2-B	The Voting System Configuration Log	Voting system	New requirement	22-05,30-05,09-06
6.4.2.2-B.1	Contents	Voting system	New requirement	22-05,30-05,09-06
6.4.2.2-B.2	Storage	Voting system	New requirement	22-05,30-05,09-06
6.4.3-A	General build quality	Voting system	New requirement	22-05,30-05,09-06
6.4.3-A.1	High quality products	Voting system	[VSS2002] I.3.4.7.a / [VVSG2005] I.4.3.7.a	22-05,30-05,09-06
6.4.3-A.2	High quality parts	Voting system	[VSS2002] I.3.4.7.b / [VVSG2005] I.4.3.7.b	22-05,30-05,09-06
6.4.3-B	Suitability of COTS Components	Voting system	New requirement	22-05,30-05,09-06
6.4.4-A	Durability	Voting system	[VSS2002] I.3.4.2 / [VVSG2005] I.4.3.2	22-05,30-05,09-06
6.4.4-B	Durability of paper	Voting system	New requirement	22-05,30-05,09-06
6.4.5-A	Electronic device maintainability	Electronic device	[VSS2002] I.3.4.4.1 / [VVSG2005] I.4.3.4.1	22-05,30-05,09-06
6.4.5-B	System maintainability	Voting system	[VSS2002] I.3.4.4.2 / [VVSG2005] I.4.3.4.2	22-05,30-05,09-06
6.4.5-C	Nameplate and labels	Voting device	[VSS2002] I.3.4.6	22-05,30-05,09-06
6.4.6-A	Operating temperature and humidity	Voting system	[P1583] 5.4.5[5]	22-05,30-05,09-06
6.4.7-A	Survive transportation	Voting device	[VSS2002] I.2.6.a / [VVSG2005] I.2.5.a, generalized	22-05,30-05,09-06
6.4.7-B	Survive storage	Voting device	[VSS2002] I.2.6.b / [VVSG2005] I.2.5.b, generalized	22-05,30-05,09-06
6.4.7-C	Precinct devices storage	Precinct tabulator, Vote-capture device	[VSS2002] I.3.2.2.1 / [VVSG2005] I.4.1.2.1	22-05,30-05,09-06
6.4.7-C.1	Design for storage and transportation	Precinct tabulator, Vote-capture device	[VSS2002] I.3.3.3 / [VVSG2005] I.4.2.3	22-05,30-05,09-06
6.4.7-D	Transportation and storage conditions benchmarks	Voting device	[VSS2002] I.3.2.2.14, modified by [P1583] 5.4.6[5]	22-05,30-05,09-06

6.4.7-D.1	Storage temperature	Voting device	[VSS2002] I.3.2.2.14.a, modified by [P1583] 5.4.6.a[5]	22-05,30-05,09-06
6.4.7-D.2	Bench handling	Voting device	[VSS2002] I.3.2.2.14.b	22-05,30-05,09-06
6.4.7-D.3	Vibration	Voting device	[VSS2002] I.3.2.2.14.c	22-05,30-05,09-06
6.4.7-D.4	Storage humidity	Voting device	[VSS2002] I.3.2.2.14.d	22-05,30-05,09-06
6.5.1-A	Records last at least 22 months	Voting system	Merged from [VSS2002] I.2.2.11 and I.3.2.3.2; temperature and humidity harmonized with Requirement part1:6.4.7-A	22-05
6.6-A	Integratability of systems and devices	Voting system	Generalized from database design requirements in [VSS2002] I.2.2.6 and some state RFP(s)	22-05,23-05
6.6-A.1	Standard device interfaces	Voting system	VVSG 2005 Section 7.9.4	22-05,23-05
6.6-B	Data export and exchange format	Voting system	VVSG 2005 Section 7.9.3	22-05,23-05
6.6-B.1	Exchange of election programming data and report data	EMS	Generalized from database design requirements in [VSS2002] I.2.2.6 and some state RFP(s)	22-05,23-05
6.6-B.2	Exchange of cast vote records	DRE, Optical Scanner	Generalized from database design requirements in [VSS2002] I.2.2.6 VVSG 2005 Section 7.9.3, and some state RFP(s)	22-05,23-05

6.6-B.3	Exchange of report data	Voting system	Part 3 Section 3.5, Part 3 Section 4.3	22-05,23-05
6.6-B.4	Specification of common format usage	Voting system	VVSG 2005 Section 7.9.3	22-05,23-05
6.6-B.5	Source code specification of common format	Voting system	VVSG 2005 Section 7.9.3	22-05,23-05
6.6-B.6	Common format across manufacturer	Voting system	New requirement	22-05,23-05
6.6-B.7	Consensus-based format	Voting system	VVSG 2005 Section 7.9.3	22-05,23-05
<i>Part 1, Chapter 7: Requirements by Voting Activity</i>				
7.1-A	EMS, ballot definition	EMS	[VSS2002] I.2.3.2.a	29-05,09-06
7.1-A.1	EMS, ballot definition details		[VSS2002] I.2.3.1.1.1.b	29-05,09-06
7.1-B	EMS, political and administrative subdivisions	EMS	[VSS2002] I.2.2.6.a and I.2.3.2.b	29-05,09-06
7.1-C	EMS, election districts	EMS	[VSS2002] I.2.2.6.a	29-05,09-06
7.1-D	EMS, voting variations	EMS	[VSS2002] I.2.2.6.b, I.2.2.8.2, I.2.3.2.d	29-05,09-06
7.1-D.1	EMS, 1-of-M		Implicit in [VSS2002]	29-05,09-06
7.1-D.2	EMS, yes/no question		New requirement / clarification of [VSS2002] intent	29-05,09-06
7.1-D.3	EMS, indicate party affiliations and endorsements		Implicit in [VSS2002]	29-05,09-06
7.1-D.4	EMS, primary elections, party-specific and non-party-specific contests	EMS $\wedge$ Primary elections device	Added precision, based on [VSS2002] I.2.2.8.2 and glossary	29-05,09-06
7.1-D.5	EMS, write-ins	EMS $\wedge$ Write-ins device	[VSS2002] I.2.4.3.1.d	29-05,09-06
7.1-D.6	EMS, straight party voting	EMS $\wedge$ Straight party voting device	Added precision, based on [VSS2002] I.2.2.8.2 and glossary	29-05,09-06
7.1-D.7	EMS, cross-party endorsement	EMS $\wedge$ Cross-party endorsement device	Clarification or extension of existing requirements	29-05,09-06
7.1-D.8	EMS, split precincts, define precincts and election districts	EMS $\wedge$ Split precincts device	Added precision, based on [VSS2002] I.2.2.8.2 and glossary	29-05,09-06

7.1-D.9	EMS, N-of-M voting	EMS $\wedge$ N-of-M voting device	Added precision, based on [VSS2002] I.2.2.8.2, I.2.3.2.a and glossary	29-05,09-06
7.1-D.10	EMS, cumulative voting	EMS $\wedge$ Cumulative voting device	Added precision, based on [VSS2002] I.2.2.8.2, I.2.3.2.a and glossary	29-05,09-06
7.1-D.11	EMS, ranked order voting	EMS $\wedge$ Ranked order voting device	Added precision, based on [VSS2002] I.2.2.8.2 and glossary	29-05,09-06
7.1-E	Election definition accuracy	EMS	[VSS2002] I.2.2.2.1.a / [VVSG2005] I.2.1.2.a	29-05,09-06
7.1-F	Voting options accuracy	EMS	Reworded from [VSS2002] I.2.2.2.1.b / [VVSG2005] I.2.1.2.b	29-05,09-06
7.1-G	EMS, confirm recording of election definition	EMS	[VSS2002] I.3.2.3.1.c and e ([VVSG2005] I.4.1.3.1.c and e), expanded to include persistent storage	29-05,09-06
7.1-H	EMS, election definition distribution	EMS	Reworded from [VSS2002] I.2.3.2.e	29-05,09-06
7.2-A	EMS, define ballot styles	EMS	[VSS2002] I.2.2.6.c	29-05,09-06
7.2-A.1	EMS, auto-format		[VSS2002] I.2.3.1.1.1.a	29-05,09-06
7.2-A.2	EMS, include votable contests		Extrapolated from relevant requirements in [VSS2002]	29-05,09-06
7.2-A.3	EMS, exclude nonvotable contests		[VSS2002] I.2.3.2.c	29-05,09-06
7.2-A.4	EMS, nonpartisan formatting		[VSS2002] I.2.3.1.2.c	29-05,09-06
7.2-A.5	EMS, jurisdiction-dependent content		Reworded from [VSS2002] I.3.2.3.1.d	29-05,09-06
7.2-A.6	EMS, primary elections, associate configurations with parties	EMS $\wedge$ Primary elections device	Reworded from [VSS2002] I.2.3.1.1.1.d	29-05,09-06

7.2-A.7	EMS, ballot rotation	EMS $\wedge$ Ballot rotation device	Added precision, based on [VSS2002] I.2.2.8.2 and glossary	29-05,09-06
7.2-A.8	EMS, split precincts, associate ballot configurations	EMS $\wedge$ Split precincts device	Added precision, based on [VSS2002] I.2.2.8.2 and glossary	29-05,09-06
7.2-B	EMS, ballot style distribution	EMS	Reworded from [VSS2002] I.2.2.6.d	29-05,09-06
7.2-B.1	EMS, ballot style identification		[VSS2002] I.2.3.1.1.1.e	29-05,09-06
7.2-C	EMS, ballot style reuse	EMS	[VSS2002] I.2.3.1.2.e and g	29-05,09-06
7.2-D	EMS, ballot style protection	EMS	[VSS2002] I.2.3.1.2.f	29-05,09-06
7.3.1-A	Support L&A testing	Voting system	[VSS2002] I.2.3.4.1, I.2.3.5.a2 and b2 (the second a and b, respectively), I.4.4.2.a	25-05,29-05,09-06
7.3-B	Built-in self-test and diagnostics	Programmed device	[VSS2002] I.2.2.4.1.j, I.2.2.8.1.a	25-05,29-05,09-06
7.3.1-C	Verify proper preparation of ballot styles	EMS	[VSS2002] I.2.2.6.f, I.4.4.2.c	25-05,29-05,09-06
7.3.1-D	Verify proper installation of ballot styles	Programmed device	[VSS2002] I.2.3.3.b, I.4.4.2.c	25-05,29-05,09-06
7.3.1-E	Verify compatibility between software and ballot styles	Programmed device	[VSS2002] I.2.3.3.c, I.4.4.2.c	25-05,29-05,09-06
7.3.1-F	Test ballots	Programmed device $\wedge$ Tabulator	[VSS2002] I.2.4.3.3.s, generalized from DREs; I.4.4.2.d and f	25-05,29-05,09-06
7.3.1-G	Test all ballot positions	Paper-based device $\wedge$ Tabulator	[VSS2002] I.2.3.4.2.a, I.4.4.2.f	25-05,29-05,09-06
7.3.1-H	Paper-based tabulators, testing calibration	Paper-based device $\wedge$ Tabulator	Interpretation of [VSS2002] I.2.3.4.2.b	25-05,29-05,09-06
7.3.1-I	Ballot marker readiness	Vote-capture device $\wedge$ Paper-based device	[VSS2002] I.2.4.1.2.1.a	25-05,29-05,09-06

7.3.1-J	L&A testing, no side-effects	Voting device	[VSS2002] I.2.3.4.1.b2 (the second b), significantly revised	25-05,29-05,09-06
7.3.1-J.1	Isolate test ballots	Programmed device $\wedge$ Tabulator	[VSS2002] I.2.4.3.3.t / [VMSG2005] I.2.3.3.3.v, generalized from DREs; I.4.4.2.e /	25-05,29-05,09-06
7.4-A	Programmed device, verify L&A performed	Programmed device	[VSS2002] I.2.4.1.1.a	25-05,29-05,09-06
7.4-B	Programmed device, disable untested devices	Programmed device	[VSS2002] I.2.4.1.1.b	25-05,29-05,09-06
7.4-C	Paper-based tabulator activation	Paper-based device $\wedge$ Tabulator	[VSS2002] I.2.4.1.2.2.a	25-05,29-05,09-06
7.4-D	Paper-based tabulator, verify activation	Paper-based device $\wedge$ Tabulator	[VSS2002] I.2.4.1.2.2.b	25-05,29-05,09-06
7.4-E	Programmed vote-capture device, open poll function	Vote-capture device $\wedge$ Programmed device	[VSS2002] I.2.4.1.3, generalized	25-05,29-05,09-06
7.4-E.1	Programmed vote-capture device, protect open poll function		[VSS2002] I.2.4.1.3.a	25-05,29-05,09-06
7.4-E.2	Programmed vote-capture device, enforce correct poll opening process		[VSS2002] I.2.4.1.3.b	25-05,29-05,09-06
7.4-E.3	Programmed vote-capture device, verify activation		[VSS2002] I.2.4.1.3.c	25-05,29-05,09-06
7.5.1.1-A	DRE, EBP, ballot activation	DRE, EBP	[VSS2002] I.2.4	09-05,29-05,09-06
7.5.1.1-A.1	DRE, EBP, credential issuance	DRE, EBP	VMSG 2005	09-05,29-05,09-06
7.5.1.1-A.2	Activation device, DRE, EBP, at most one cast ballot per session	Activation device, DRE, EBP	[VSS2002] I.2.4.2.d, rewritten to respect the limits of what the system can do	09-05,29-05,09-06
7.5.1.1-B	Activation device creates contemporaneous record	Activation device	New requirement	09-05,29-05,09-06
7.5.1.1-C	Activation device, DRE, EBP, control ballot configuration	Activation device, DRE, EBP	[VSS2002] I.2.4.2.a	09-05,29-05,09-06
7.5.1.1-C.1	DRE and EBP, enable only applicable contests	DRE, EBP	[VSS2002] I.2.4.2.g., [VSS2002] I.2.4.2.h	09-05,29-05,09-06

7.5.1.1-C.2	DRE and EBP, select ballot configuration for party in primary elections	DRE $\wedge$ Primary elections device, EBP $\wedge$ Primary elections device	[VSS2002] I.2.4.2.f	09-05,29-05,09-06
7.5.1.2-A	Credential issuance, ballot activation preserves secrecy	Activation device, DRE, EBP	New requirement	09-05,29-05,09-06
7.5.1.2-A.1	DRE and EBP, open primaries, party selection should be private	DRE $\wedge$ Open primaries device, EBP $\wedge$ Open primaries device	New requirement	09-05,29-05,09-06
7.5.1.2-A.2	Credential issuance records preserve secrecy of the ballot	Activation device, DRE, EBP	New requirement	09-05,29-05,09-06
7.5.1.2-A.3	Ballot activation for provisional voting permits identification of voter	Activation device, DRE, EBP	New requirement	09-05,29-05,09-06
7.5.1.3-A	Credentials and token used for ballot activation	Voting device	New requirement	09-05,29-05,09-06
7.5.1.3-A.1	Token limited in capacity	Activation device	New requirement	09-05,29-05,09-06
7.5.1.3-A.2	Ballot activation token de-activated after casting	DRE, EBP	New requirement	09-05,29-05,09-06
7.5.1.3-A.3	Ballot activation token should be non-reusable	Activation device	New requirement	09-05,29-05,09-06
7.5.1.3-A.4	Integrity and authenticity of ballot activation information	Activation device, DRE, EBP	New requirement	09-05,29-05,09-06
7.5.1.4-A	Activation device may access remote registration database	Activation device Electronic device	New requirement	09-05,29-05,09-06
7.5.1.4-A.5	Activation device cannot connect to multiple networks	Activation device Electronic device	New requirement	09-05,29-05,09-06
7.5.1.4-A.6	Access to remote registration database is configurable	Activation device Electronic device	New requirement	09-05,29-05,09-06
7.5.1.4-A.7	Notification of access to remote registration database	Activation device Electronic device	New requirement	09-05,29-05,09-06
7.5.1.4-A.8	Remote access failure backup capability	Voting system	New requirement	09-05,29-05,09-06
7.5.1.4-A.9	Activation device connects to router/firewall	Activation device Electronic device	New requirement	09-05,29-05,09-06
7.5.1.4-B	Source code reviews of activation device	Activation device Electronic device	New requirement	09-05,29-05,09-06
7.5.2-A	No advertising	Vote-capture device	Clarification of [VSS2002] I.2.3.1.3.1.b	09-05,29-05,09-06
7.5.2-B	Capture votes	Vote-capture device	[VSS2002] I.2.4.3.1.c	09-05,29-05,09-06

7.5.3-A	Vote-capture device, voting variations	Vote-capture device	Extrapolated from [VSS2002] I.2.2.8.2 and I.2.4	09-05,29-05,09-06
7.5.3-A.1	Vote-capture device, 1-of-M	Vote-capture device	[VSS2002] I.2.4. Extended [VSS2002] I.2.4.2.e to all systems	09-05,29-05,09-06
7.5.3-A.2	Vote-capture device, yes/no question	Vote-capture device	New requirement / clarification of [VSS2002] intent	09-05,29-05,09-06
7.5.3-A.3	Vote-capture device, indicate party affiliations and endorsements	Vote-capture device	Added precision	09-05,29-05,09-06
7.5.3-A.4	Vote-capture device, closed primaries	Vote-capture device $\wedge$ Closed primaries device	Added precision, based on [VSS2002] I.2.2.8.2 and glossary	09-05,29-05,09-06
7.5.3-A.5	Vote-capture device, open primaries	Vote-capture device $\wedge$ Open primaries device	Added precision, based on [VSS2002] I.2.2.8.2 and glossary	09-05,29-05,09-06
7.5.3-A.6	Vote-capture device, write-ins	Vote-capture device $\wedge$ Write-ins device	[VSS2002] I.2.4.3.1.d	09-05,29-05,09-06
7.5.3-A.7	Vote-capture device, support write-in reconciliation	Vote-capture device $\wedge$ Write-ins device	Added precision based on clarification of write-in reconciliation process	09-05,29-05,09-06
7.5.3-A.8	Vote-capture device, ballot rotation	Vote-capture device $\wedge$ Ballot rotation device	Added precision, based on [VSS2002] I.2.2.8.2 and glossary	09-05,29-05,09-06
7.5.3-A.9	Ballot rotation, equal time for each contest choice	Vote-capture device $\wedge$ Programmed device $\wedge$ Ballot rotation device	Clarification or extension of existing requirements	09-05,29-05,09-06
7.5.3-A.10	Vote-capture device, straight party voting	Vote-capture device $\wedge$ Straight party voting device	Added precision, based on [VSS2002] I.2.2.8.2 and glossary	09-05,29-05,09-06

7.5.3-A.11	Vote-capture device, cross-party endorsement	Vote-capture device $\wedge$ Cross-party endorsement device	Clarification or extension of existing requirements	09-05,29-05,09-06
7.5.3-A.12	Vote-capture device, split precincts	Vote-capture device $\wedge$ Split precincts device	Added precision, based on [VSS2002] I.2.2.8.2 and glossary	09-05,29-05,09-06
7.5.3-A.13	Vote-capture device, N-of-M voting	Vote-capture device $\wedge$ N-of-M voting device	Added precision, based on [VSS2002] I.2.2.8.2 and glossary	09-05,29-05,09-06
7.5.3-A.14	Vote-capture device, cumulative voting	Vote-capture device $\wedge$ Cumulative voting device	Added precision, based on [VSS2002] I.2.2.8.2 and glossary	09-05,29-05,09-06
7.5.3-A.15	Vote-capture device, ranked order voting	Vote-capture device $\wedge$ Ranked order voting device	Added precision, based on [VSS2002] I.2.2.8.2 and glossary	09-05,29-05,09-06
7.5.3-A.16	Vote-capture device, provisional-challenged ballots	Vote-capture device $\wedge$ Provisional-challenged ballots device	Added precision, based on [VSS2002] I.2.2.8.2 and glossary	09-05,29-05,09-06
7.5.3-A.17	DRE, categorize provisional ballots	DRE $\wedge$ Provisional-challenged ballots device	[P1583] 5.6.5.2.s.2[5]	09-05,29-05,09-06
7.5.3-A.18	Vote-capture device, review-required ballots	Vote-capture device $\wedge$ Review-required ballots device	Extrapolated from [VSS2002] I.2.5.2	09-05,29-05,09-06
7.5.4-A	Record votes as voted	Vote-capture device	[VSS2002] I.2.2.2.1.c / [VMSG2005] I.2.1.2.c	09-05,29-05,09-06
7.5.4-A.1	Records consistent with feedback to voter		Added precision	09-05,29-05,09-06
7.5.4-B	DRE, confirm votes recorded	DRE	[VSS2002] I.3.2.4.3.3.c, expanded to include persistent storage	09-05,29-05,09-06

7.5.4-C	Casting	Voting system	[VSS2002] I.2.4. Extended [VSS2002] I.2.4.2.e to all systems	09-05,29-05,09-06
7.5.4-C.1	Equipment allows each eligible voter to vote		[VSS2002] I.2.4.2.b, generalized to all systems	09-05,29-05,09-06
7.5.4-C.2	Paper-based, must have secure ballot boxes	Paper-based device ^ Vote-capture device	[VSS2002] I.2.4.1.2.1.c	09-05,29-05,09-06
7.5.4-D	DRE, cast is committed	DRE	[VSS2002] I.2.4.3.3.n	09-05,29-05,09-06
7.5.5-A	DRE, at least two separate copies of CVR	DRE	[VSS2002] I.2.2.2.2, I.2.2.4.2 and I.3.2.4.3.2.c	09-05,29-05,09-06
7.5.5-A.1	DRE, redundant CVRs on physically separate media	DRE	[VSS2002] I.2.2.4.2 and I.3.2.4.3.2.c	09-05,29-05,09-06
7.5.6-A	Tabulator, prevent counter overflow	Tabulator	Clarification of [VSS2002] II.5.4.2.g	09-05,29-05,09-06
7.5.6-A.1	DRE, stop when full	DRE	Clarification of [VSS2002] II.5.4.2.g	09-05,29-05,09-06
7.6-A	DRE, no CVRs before close of polls	DRE	[VSS2002] I.2.4.3.3.r	09-05,29-05,09-06
7.6-B	Programmed vote-capture devices, poll-closing function	Vote-capture device Programmed device	Reworded from [VSS2002] I.2.5	09-05,29-05,09-06
7.6-B.1	Programmed vote-capture devices, no voting when polls are closed	Vote-capture device Programmed device	Reworded from [VSS2002] I.2.5.1.a	09-05,29-05,09-06
7.6-B.2	DRE, no ballot casting when polls are closed	DRE	Reworded from [VSS2002] I.2.5.1.a	09-05,29-05,09-06
7.6-B.3	Programmed vote-capture devices, poll closing integrity check	Vote-capture device Programmed device	Reworded from [VSS2002] I.2.5.1.b	09-05,29-05,09-06
7.6-B.4	Programmed vote-capture devices, report on poll closing process	Vote-capture device Programmed device	Reworded from [VSS2002] I.2.5.1.d	09-05,29-05,09-06
7.6-B.5	Programmed vote-capture devices, prevent reopening polls	Vote-capture device Programmed device	Revised from [VSS2002] I.2.5.1.e; made consistent with [GPO90] 2.2.3.1	09-05,29-05,09-06

7.6-C	Precinct EMS, post-election reports	Precinct tabulator , EMS	Reworded from [VSS2002] I.2.5	09-05,29-05,09-06
7.7.1-A	Detect and prevent ballot style mismatches	Voting system	Amplification of existing requirements	09-05,29-05,09-06
7.7.1-B	Detect and reject ballots that are oriented incorrectly	Paper-based device,Tabulator	New requirement	09-05,29-05,09-06
7.7.2-A	Tabulator, voting variations	Tabulator	[VSS2002] I.2.2.8.1 plus I.2.2.8.2	09-05,29-05,09-06
7.7.2-A.1	Tabulator, 1-of-M	Tabulator	Implicit in [VSS2002]	09-05,29-05,09-06
7.7.2-A.2	Tabulator, yes/no question	Tabulator	New requirement / clarification of [VSS2002] intent	09-05,29-05,09-06
7.7.2-A.3	Tabulator, absentee voting	Tabulator, Absentee voting device	Added precision, based on [VSS2002] I.2.2.8.1, I.2.2.8.2 and glossary	09-05,29-05,09-06
7.7.2-A.4	Tabulator, provisional-challenged ballots	Tabulator, Provisional-challenged ballots device	Added precision, based on [VSS2002] I.2.2.8.1, I.2.2.8.2 and glossary	09-05,29-05,09-06
7.7.2-A.5	Tabulator, accept or reject provisional-challenged ballots individually	Tabulator, Provisional-challenged ballots device	Added precision, based on [VSS2002] I.2.2.8.1, I.2.2.8.2 and glossary	09-05,29-05,09-06
7.7.2-A.6	Tabulator, accept or reject provisional-challenged ballots by category	Tabulator, Provisional-challenged ballots device	[P1583] 5.6.5.2.s.3[5]	09-05,29-05,09-06
7.7.2-A.7	Tabulator, primary elections	Tabulator, Primary elections device	Added precision, based on [VSS2002] reporting	09-05,29-05,09-06
7.7.2-A.8	Tabulator, write-ins	Tabulator, Write-ins device	Added precision, based on [VSS2002] I.2.2.8.1, I.2.2.8.2 and glossary	09-05,29-05,09-06

7.7.2-A.9	Tabulator, support write-in reconciliation	Tabulator, Write-ins device	Added precision based on clarification of write-in reconciliation process	09-05,29-05,09-06
7.7.2-A.10	Tabulator, ballot rotation	Tabulator, Ballot rotation device	Added precision, based on [VSS2002] I.2.2.8.1, I.2.2.8.2 and glossary	09-05,29-05,09-06
7.7.2-A.11	Tabulator, straight party voting	Tabulator, Straight party voting device	Added precision, based on [VSS2002] I.2.2.8.1, I.2.2.8.2 and glossary	09-05,29-05,09-06
7.7.2-A.12	Tabulating straight party votes	Tabulator, Straight party voting device	Added precision, based on [VSS2002] I.2.2.8.1, I.2.2.8.2 and glossary	09-05,29-05,09-06
7.7.2-A.13	Tabulator, cross-party endorsement	Tabulator , Cross-party endorsement device	Added precision, based on [VSS2002] I.2.2.8.1, I.2.2.8.2 and glossary	09-05,29-05,09-06
7.7.2-A.14	Tabulator, split precincts	Tabulator, Split precincts device	Added precision, based on [VSS2002] I.2.2.8.1, I.2.2.8.2 and glossary	09-05,29-05,09-06
7.7.2-A.15	Tabulator, N-of-M voting	Tabulator, N-of-M voting device	Added precision, based on [VSS2002] I.2.2.8.1, I.2.2.8.2 and glossary	09-05,29-05,09-06
7.7.2-A.16	Tabulator, cumulative voting	Tabulator, Cumulative voting device	Added precision, based on [VSS2002] I.2.2.8.1, I.2.2.8.2 and glossary	09-05,29-05,09-06
7.7.2-A.17	Tabulator, ranked order voting	Tabulator, Ranked order voting device	[VSS2002] I.2.2.8.1 plus I.2.2.8.2	09-05,29-05,09-06
7.7.3-A	Central paper tabulator, ballot separation	Central tabulator, Paper-based device	[VSS2002] I.3.2.5.1.2	09-05,29-05,09-06

7.7.3-A.1	Central paper tabulator, unreadable ballots	Central tabulator, Paper-based device	[VSS2002] I.3.2.5.1.2	09-05,29-05,09-06
7.7.3-A.2	Central paper tabulator, write-ins	Central tabulator, Paper-based device,Review- required ballots device	[VSS2002] I.3.2.5.1.2	09-05,29-05,09-06
7.7.3-A.3	Central paper tabulator, overvotes, undervotes, blank ballots	Central tabulator, Paper-based device,Review- required ballots device	[VSS2002] I.3.2.5.1.2	09-05,29-05,09-06
7.7.3-B	Precinct paper tabulator, write-ins	Precinct tabulator $\wedge$ Paper-based device $\wedge$ Review-required ballots device	[VSS2002] I.3.2.5.1.3.b	09-05,29-05,09-06
7.7.3-C	ECOS, react to marginal marks and overvotes	ECOS	New requirement	09-05,29-05,09-06
7.7.4-A	Paper-based tabulator, ability to clear misfeed	Paper-based device $\wedge$ Tabulator	[VSS2002] I.3.2.5.1.4.a, expanded to include jamming and ballots that were read	09-05,29-05,09-06
7.7.4-B	Paper-based tabulator, indicate status of misfed ballot	Paper-based device $\wedge$ Tabulator	[MS05] 14.2.5.3 (page 46)	09-05,29-05,09-06
7.7.5-A	Optical scanner, ignore unmarked voting targets	Optical scanner	[VSS2002] I.3.2.5.2, "Recognize vote punches or marks, or the absence thereof"	09-05,29-05,09-06
7.7.5-B	ECOS, accurately detect marks	ECOS	Narrowed from [VSS2002] I.3.2.5.2.a and I.3.2.6.1.1	09-05,29-05,09-06
7.7.5-C	MCOS, accurately detect perfect marks	MCOS	[VSS2002] I.3.2.5.2.a and I.3.2.6.1.1	09-05,29-05,09-06

7.7.5-D	MCOS, accurately detect imperfect marks	MCOS	Many issues and public comments. Specification of mark originated with recommendation in Issue #1322, changed to reduce ambiguity.	09-05,29-05,09-06
7.7.5-E	Paper-based tabulators, ignore extraneous outside voting targets	Paper-based device ^ Tabulator	Clarified from [VSS2002] I.3.2.5.2.b	09-05,29-05,09-06
7.7.5-F	Optical scanner, ignore extraneous inside voting targets	Optical scanner	Clarified from [VSS2002] I.3.2.5.2.b	09-05,29-05,09-06
7.7.5-G	MCOS, ignore hesitation marks	MCOS	Clarified from [VSS2002] I.3.2.5.2.b	09-05,29-05,09-06
7.7.5-H	MCOS, marginal marks, no bias	MCOS	New requirement	09-05,29-05,09-06
7.7.5-I	MCOS, marginal marks, repeatability	MCOS	New requirement	09-05,29-05,09-06
7.7.6-A	Precinct EMS consolidation	Precinct tabulator, EMS	Reworded from [VSS2002] I.2.5.3.2	09-05,29-05,09-06
7.7.6-A.1	DRE, consolidate in 5 minutes	Precinct tabulator, EMS, DRE	Reworded from [VSS2002] I.3.2.6.2.1	09-05,29-05,09-06
7.8.1-A	Reports are time stamped	Voting system	New requirement	09-05,29-05,09-06
7.8.1-B	Timestamps should be ISO 8601 compliant	Voting system	New requirement	09-05,29-05,09-06
7.8.1-C	Reporting is non-destructive	Programmed device	From [VSS2002] I.2.2.6.h, I.2.5.3.1.g, and I.2.5.3.2.d	09-05,29-05,09-06
7.8.2-A	Audit reports	Voting system	[VSS2002] I.2.2.6.i and I.2.5.3.1.f	09-05,29-05,09-06
7.8.2-B	Pre-election reports	EMS	[VSS2002] I.4.4.1 / [VVSG2005] I.5.4.1	09-05,29-05,09-06
7.8.2-C	Status reports	Programmed device	Reworded from [VSS2002] I.2.3.4.1.b	09-05,29-05,09-06
7.8.2-D	Readiness reports, per polling place	In-person voting	[VSS2002] I.2.3.5, separated generic precinct vs. precinct tabulator reqs, modified to deal with failures	09-05,29-05,09-06

7.8.2-E	Readiness reports, precinct tabulator	Precinct tabulator	[VSS2002] I.2.3.5, separated generic precinct vs. precinct tabulator reqs, harmonized with Requirement part1:7.8.2-F, modified to deal with failures, deleted "special voting	09-05,29-05,09-06
7.8.2-F	Readiness reports, central tabulator	Central tabulator	[VSS2002] I.2.3.6, harmonized with Requirement part1:7.8.2-E, modified to deal with failures, deleted "special voting	09-05,29-05,09-06
7.8.2-G	Readiness reports, public network test ballots	Voting system	[VSS2002] I.4.4.2.g / [VMSG2005] I.5.4.2.g	09-05,29-05,09-06
7.8.3.1-A	Reporting, ability to produce text	Voting system	[VSS2002] I.3.2.7.2 / [VMSG2005] I.4.1.7.2	09-05,29-05,09-06
7.8.3.1-B	Report all votes cast	Voting system	[VSS2002] I.2.2.2.1.c as expanded by [P1583] 5.2.1.1.c[5]	09-05,29-05,09-06
7.8.3.1-C	Account for all cast ballots and all valid votes	Voting system		09-05,29-05,09-06
7.8.3.1-D	Vote data reports, discrepancies can't happen	Voting system	Reworded from [VSS2002] I.3.2.6.2.2, extended to all systems	09-05,29-05,09-06
7.8.3.1-D.1	Discrepancies that happen anyway must be flagged	Voting system	New requirement in response to Issue #1366	09-05,29-05,09-06
7.8.3.1-D.2	Discrepancies that happen anyway must be explainable	Voting system	Reworded and generalized from [VSS2002] I.3.2.6.2.2	09-05,29-05,09-06

7.8.3.1-E	Reporting, combined precincts	Voting system	Derived from [ND06] 5.04.05.g, [UT04] Requirement 23 and [MS05] 14.3.2.3	09-05,29-05,09-06
7.8.3.1-F	Precinct tabulators, no tallies before close of polls	Precinct tabulator	Revised from [VSS2002] I.2.5.3.2	09-05,29-05,09-06
7.8.3.2-A	Report cast ballots	Voting system	Revised from [VSS2002] I.2.2.2	09-05,29-05,09-06
7.8.3.2-B	Report read ballots	Voting system	Revised from [VSS2002] I.2.2.2	09-05,29-05,09-06
7.8.3.2-B.1	Report read ballots, multi-page		Revised from [VSS2002] I.2.2.2	09-05,29-05,09-06
7.8.3.2-B.2	Report read ballots by party	Primary elections	Revised from [VSS2002] I.2.2.2	09-05,29-05,09-06
7.8.3.2-B.3	Report read provisional ballots	Provisional-challenged ballots	Revised from [VSS2002] I.2.2.2	09-05,29-05,09-06
7.8.3.2-C	Report counted ballots	Voting system	Revised from [VSS2002] I.2.2.2	09-05,29-05,09-06
7.8.3.2-C.1	Report counted ballots by party	Primary elections	Revised from [VSS2002] I.2.2.2	09-05,29-05,09-06
7.8.3.2-C.2	Report counted provisional ballots	Provisional-challenged ballots	Revised from [VSS2002] I.2.2.2	09-05,29-05,09-06
7.8.3.2-C.3	Report blank ballots		Revised from [VSS2002] I.2.2.2	09-05,29-05,09-06
7.8.3.2-D	Report counted ballots by contest	Voting system	Revised from [VSS2002] I.2.2.2	09-05,29-05,09-06
7.8.3.3-A	Report votes for each contest choice	Voting system	Revised from [VSS2002] I.2.2.2	09-05,29-05,09-06
7.8.3.3-B	Report overvotes for each contest	Voting system	Revised from [VSS2002] I.2.2.2	09-05,29-05,09-06
7.8.3.3-B.1	Reporting overvotes, ad hoc queries	Voting system	From [VSS2002] I.2.2.6.h and I.2.5.3.1.e	09-05,29-05,09-06
7.8.3.3-C	Report undervotes for each contest	Voting system	From [VSS2002] I.2.2.6.h and I.2.5.3.1.e	09-05,29-05,09-06
7.8.3.3-D	Ranked order voting, report results	Ranked order voting	New Requirement	09-05,29-05,09-06

7.8.3.3-E	Include in-person votes	In-person voting	New Requirement	09-05,29-05,09-06
7.8.3.3-F	Include absentee votes	Absentee voting	New Requirement	09-05,29-05,09-06
7.8.3.3-G	Include write-in votes	Write-ins	New Requirement	09-05,29-05,09-06
7.8.3.3-H	Include accepted provisional-challenged votes	Provisional-challenged ballots	New Requirement	09-05,29-05,09-06
7.8.3.3-I	Include accepted reviewed votes	Review-required ballots	New Requirement	09-05,29-05,09-06